Care and Maintenance of Your Unlocked NINTENDO 2DS

This guide was written by T420 Archiving Cooperative, who are solely responsible for the accuracy of its content. T420 and No-Intro are not affiliated with Nintendo or any of its subsidiaries.

Introduction

This Nintendo 2DS console has been unlocked using the methodology described at the 3DS Hacks Guide.

(https://3ds.hacks.guide)

The console has been pre-configured to be immediately useful for the most common use-cases, so all you really need to do is turn the console on for instant access to all the open-source goodness that game-console unlocking provides. We hope this guide will cover any situations that may arise in the future.

For further information on your unlocked console's abilities, including how to use, add, or remove features, please see the Hacks Wiki.

STOP!!

Before continuing with normal gameplay, it is strongly advised that you create an NAND backup of your system!

Plug in your A/C adapter to a wall socket and the charging cable to the Nintendo 2DS's power port. This is to ensure the system remains fully powered during the NAND backup operation.

Press and hold the START button while turning on your console to launch GodMode9.

Press the HOME button to open the Action menu and select "Scripts...", then "GM9Megascript".

Select "Backup Options", then "SysNAND Backup". Press the A button to confirm your selection. Wait for the backup operation to complete; this will take quite some time.

Press A to continue, then B to return to the main GodMode9 menu and select "Exit". If prompted to do so, press A to re-lock write permissions.

Navigate to [S:] SYSNAND VIRTUAL, then press A on essential.exefs and select "Copy to 0:/gm9/out", pressing A if prompted to overwrite files.

Press A to continue from this point, then hold the R button and press START to power off the console (**do not press POWER**).

Remove the SD card from the system and insert it into a computer. Open "gm9 > out" and copy the files ending in ".bin", ".bin.sha", and ".exefs" to a safe location on your computer, such as a folder called "2DS NAND Backup" in your Documents directory.

If anything ever goes wrong with your unlocked Nintendo 2DS to the point it becomes unusable, this backup can be used to restore your system to a functional state.

To restore an NAND backup, please see this website for details:

[https://wiki.hacks.guide/wiki/3DS:GodMode9/Usage#Restoring_a_NAND_backup

Regular Operating Instructions

Battery

Before using, please use the included charging cable to charge your console to full power. Plug the double-pronged end of the charging adapter into a power outlet and the cable into the power socket on the top of the 2DS console, between the cartridge slot and the R button.

The console will display an orange light while charging is in progress; charging is complete when the light turns off. Please resist the urge to play the console while charging, as this will increase the lifespan of your console's battery.

If it becomes necessary to replace the battery, a regular philips-head screwdriver can be used to remove the back plate.

The console's battery contains lithium, which must not be disposed of in a regular trash can! Check your local guidelines for details of how best to dispose of lithium-ion batteries.

Game Cards

The Nintendo 2DS can accept all Nintendo DS and Nintendo 3DS game cards. Insert them into the cartridge slot on the top of the console between the power socket and the L button. Insert the card so the connector pins are facing down and the label is facing the backside of the console. Press the game card down into the cartridge slot until you feel it click into place.

*Please note: This console is NOT capable of playing games intended for the **New Nintendo 3DS** console.*

If you remove a Nintendo 3DS game card from the system while the game is running, you will be immediately returned to the Home menu. Please do not remove Nintendo DS games from the slot while the game is running.

SD Cards

The console can admit a standard SD card through a slot behind a door on the righthand side. Under ordinary circumstances, the SD card is optional, *however on this unlocked system, the SD card included with the system **must** be docked there at all times.* Unless it becomes necessary to use the SD card in a computer (e.g. installing new game ROM files, changing configuration settings on an installed program, performing a backup operation), leave the SD card docked in the console so you do not lose it!

If you accidentally turn on the console while the SD card is undocked, you will be intercepted by the Luma3DS custom firmware. Turn off the console without selecting any of the options, then re-insert the SD card.

If you lose the included SD card, you will no longer be able to use your Nintendo 2DS system! For safety, it is STRONGLY recommended that you use a computer to make a backup of the SD card's contents immediately upon returning home with it. This way, if you do accidentally lose the SD card, you will be able to simply copy the backed-up files onto another 32- or 64-gigabyte SD card.

Home screen operation

While on the Home menu, use the Circle Pad or +Control Pad to navigate around the screen, or use the stylus to tap on a desired item, then press A or tap "Launch" to run the software.

Tap-Hold on an item to move it around the screen. It will remain selected only as long as it is being held. Select an open slot on the Home menu and select "Create Folder" from the bottom of the touchscreen to create a new folder at that location. To rename it, select "Options", then "Rename", then enter a new name. To add items to the folder, tap-hold on the desired item, then drag it to the folder. If the folder is on a different page of the menu than what is presently visible, move the item onto the arrow on the left or right side of the touchscreen to move the necessary page into view.

Internet

Most online functionality of the Nintendo 3DS family of systems will no longer work. The only exceptions are the Universal Updater UniStore and the Pretendo Network. While the internet browser will still run, it is no longer practical to use, since it does not support the SSL encryption layer currently employed on most websites.

Camera

The onboard rear-facing camera will, confusingly, take 3D photographs despite the fact it cannot display a 3D image. The camera has only an 0.3 megapixel resolution, approximately equal to a disposable camera from the early 1990s. However, it has the virtue of not using the photos you take with it for analytics or law enforcement. Fortunately, since the pictures are so small in filesize, you can still use the camera despite the space constraints on the included SD card. While on the home menu, press L and R at the same time to start the camera.

Uninstalling software

If you do not wish to play one or more of the pre-installed games, use the system's native System Settings menu to uninstall undesirable software. Open System Settings > Data Management, then either Nintendo 3DS (for 3DS games and emulators) or DSiWare (for DS games and the GameYob emulator). Important tools necessary for the custom firmware to operate may also be listed here; please do not uninstall them. If they are getting in your way on the Home screen, move them to an unintrusive place on a different page of the menu.

Unlocked Console Features

Luma3DS Firmware

The custom firmware installed on the system is called Luma3DS and is interacted with through the Rosalina Menu, which can be opened at any time by pressing the following buttons at the same time...

- L
- +Control Pad DOWN
- SELECT

The most common use for opening the Rosalina menu is to take a screenshot, which will save the currently displayed top and bottom screen images to the SD card in luma > screenshots as Windows 24-bit Bitmaps (*.BMP).

Please do not select any of the other options unless directed to do so by a tutorial, as many of these will change how the CFW interacts with the console and may lead to an unstable system or a brick.

Universal-Updater UniStore

This is the "app store" for your jailbroken 2DS, offering software such as game console emulators, savefile managers, and even open-source games. Software made for 3DS will typically have 3DSX and CIA versions available. 3DSX files can only be opened from the Homebrew Launcher, while CIA files will be added to the Home screen. Software for Nintendo DS will be available typically only as an NDS file, which will be added to the Home screen as DSiWare.

TWiLight Menu

Duplicates the Nintendo DSi Home screen and allows you to access Nintendo DS game ROMs. It should not theoretically be necessary to deal with it, since NTR Forwarder Generator can add these games to the 3DS Home screen. During pre-configuration, NTR Forwarder Generator was used to add Nintendo DS games in this manner.

Emulation

One of the main criticisms of the Nintendo 3DS family of systems was its exclusive selection of games available over the eShop's Virtual Console service, including the baffling decision to make the Super NES games available only for New Nintendo 3DS players. Game console emulators sidestep all of that and allow you to install and play game ROM files, whether Nintendo deigned to sell them on their service or not.

A number of emulators have been pre-installed on the system along with several games.

- **StellaDS**: Atari 2600
- **VirtuaNES**: Nintendo Entertainment System
- **PicoDrive**: Sega Genesis
- **Snes9x**: Super NES
- **GameYob**: Game Boy Color

Pre-installed games

Atari 2600- Adventure | Battlezone | Beamrider | Berzerk! | Donkey Kong | Frogger | Ikari Warriors | Laser Gates | Mario Bros. | Midnight Magic | Missile Command | Ms. Pac-Man | Pitfall! | River Raid | Yar's Revenge

Nintendo Entertainment System- 3-D WorldRunner | Batman: The Movie | Blaster Master | Castlevania | Castlevania III: Dracula's Curse | Contra | Donkey Kong | Donkey Kong Jr. | EarthBound Beginnings | Faxanadu | Final Fantasy | Golf | Journey to Silius | Kid Icarus | Kirby's Adventure | The Legend of Zelda | Mario Bros. | Metroid | NES Open Golf | Pac-Man | Paperboy | Pinball | R.C. Pro-Am | River City Ransom | Super C | Super Mario Bros. | Super Mario Bros. 2 | Super Mario Bros. 3 | Tetris | Zelda II: The Adventure of Link

Sega Genesis- Aladdin | Altered Beast | B.O.B. | Castlevania: Bloodlines | Crusader of Centy | Golden Axe | James Bond 007: The Duel | Landstalker | Ristar | Sonic the Hedgehog | Sonic 2 | Sonic 3 | Sonic & Knuckles | Sonic 3D Blast | ToeJam & Earl | ToeJam & Earl in Panic on Funkotron

Super NES- Aero the Acro-Bat 2 | Astérix & Obélix | Blackthorne | Chrono Trigger | Donkey Kong Country | DKC2: Diddy's Kongquest | DKC3: Dixie Kong's Double Trouble | EarthBound | Earthworm Jim | F-Zero | Harvest Moon | Illusion of Gaia | Killer Instinct | Kirby's Dream Land 3 | The Legend of Zelda: A Link to the Past | The Lost Vikings | Norse by Norsewest: The Lost Vikings II | The Mask | Pilotwings | Prehistorik Man | Prince of Persia | Sky Blazer | Soul Blazer | Super Castlevania IV | Super Mario All-Stars+World | Super Mario Kart | Super Mario RPG: The Legend of the Seven Stars | Super Metroid | Super Star Wars | Zero the Kamikaze Squirrel

Game Boy / Color- Alleyway | Castlevania: The Adventure | Donkey Kong 94 | F-1 Race | Game & Watch Gallery | Game & Watch Gallery 2 | Game & Watch Gallery 3 | Kirby's Dream Land | Kirby's Dream Land 2 | The Legend of Zelda: Link's Awakening DX | Mario's Picross | Pokémon Blue Version | Pokémon Crystal | Shantae | Super Mario Bros. Deluxe | Super Mario Land | Super Mario Land 2: 6 Golden Coins | Super Mario Land 3: Wario Land | Tetris | Wario Land II

Game Boy Advance- Action Man: Robot Atak | Banjo-Kazooie: Grunty's Revenge | Batman: Rise of Sin Tzu | Castlevania: Circle of the Moon | Crash Bandicoot: The Huge Adventure | Lady Sia | Mario Kart: Super Circuit | Mario vs. Donkey Kong | Metroid Fusion | Pokémon LeafGreen | Pokémon Sapphire | Rayman 3 | Sonic Advance | Sonic Advance 2 | Super Mario Advance 2: Super Mario World | Super Mario Advance 4: Super Mario Bros. 3 | The Legend of Zelda: The Minish Cap | The Sims: Bustin' Out

Wumiibo

Wumiibo is a re-envisioning of the 2DS's NFC module, intended to simulate the presence of amiibo figures and cards without the need for them to be physically nearby. For your convenience, this utility has already been installed and configured; all that needs to be done is for you to select what game to generate amiibo for. This can be done by launching the Wumiibo program from the Home screen and selecting "Generate amiibos for game" (*sic.*), then choosing a game from the list. Only the games with amiibo support are listed here.

To use Wumiibo in games, get to the place in the game where it asks you to scan an amiibo, then press the following buttons at the same time to bring up the Wumiibo menu on the touch screen:

- L
- +Control Pad DOWN
- START

The game will freeze while the menu is open. This is normal.

In this menu, choose "Select a figure", then choose the title ID of the game currently running, followed by the name of the figure. The game will behave as though you have placed an amiibo figure on the NFC Reader/Writer platform. When the game asks you to remove the figure from the platform, press L+DOWN+START again and choose "Force Stop Emulation".

Please note that some games exhibit odd behaviour when Wumiibo-generated amiibo are in use and one (*Animal Crossing: Happy Home Designer)* will not work at all.

Frequently-asked Questions

Q. How can I exchange the included SD card for the next size up?

A. Simply copy the contents of the SD card into a folder on your computer, then copy them from there onto your new 64-gigabyte SD card. Please do not go any higher in storage capacity than 128 gigabytes, as this will cause the system to behave strangely. The precise reason for that is not currently known.

Q. What kinds of SD cards are compatible?

A. As long as you keep to 128 GB total storage or below, any size or speed class is compatible. The physical SD card slot on the Nintendo 2DS is designed to admit a standard SD card, so make sure you use an adapter with a microSD card.

Q. Something caused the system to stop working. How can I get the problem fixed?

A. In the case of a software problem (e.g. bad code causing problems, a firmware brick), you can fix it by restoring the NAND backup you created earlier.

In the case of a hardware problem (e.g. Circle Pad not responding, buttons becoming stiff), you will need to take the system to an electronics repair specialist.

Q. Nintendo issued a surprise update that bricked my unlocked 2DS system. Is that the end?

A. Nintendo has been known to force surprise updates on the 3DS family of consoles. While this is becoming less and less frequent as time wears on, the 3DS homebrew community is cavey to Nintendo's tricks and will issue a permanent fix as soon as possible. Typically, restoring your NAND backup will fix the problem.

Q. How do I install new game ROM files to play on the emulators?

A. For the home console emulators, insert the 2DS's SD card into your computer and open the "roms" folder, then the folder for the console you have a ROM for, and copy the ROM file into it. You can also use this method to delete pre-installed ROMs that you do not need.

Q. How do I install new Game Boy Advance ROMs?

A. If you want to install ROMs onto the home screen, you will need to run *New Super Ultimate Injector* on a Windows PC and create a Virtual Console injection. Details on how to do this can be found at this website...

[https://wiki.hacks.guide/wiki/3DS:Virtual_Console/Creation]

Q. Can I re-lock the 2DS (i.e. return it to stock condition)?

There really isn't a need to uninstall the custom firmware from this console. Most software problems have relatively simple fixes that can be traced down from an internet search. If your concern is Nintendo bricking your console or banning you from something, the eShop and Nintendo Network have both been shut down and Nintendo is trying to pretend the DS line never existed. Plus, there's something like 10 million 3DS systems in use right now, and half of them are unlocked, so you're quite literally a needle in a haystack made of other needles. However, if, for whatever reason, you feel it's best to re-lock your 2DS console, follow the instructions at this website...

[https://3ds.hacks.guide/uninstall-cfw.html]

Your 2DS will brick if you have done any of the following to it:

- **Changed the region setting of the console (e.g. changing a North American 2DS to a Japan setting)**
- **Installed a custom keyboard**
- **Installed a custom Home menu**
- **Changed the console's encryption key in** movable.sed

Also, all unsigned software will be removed during the uninstall process and cannot be restored unless the system is re-hacked and all those files are located again. This includes emulators, pre-installed games, their savefiles, the Wumiibo NFC driver, and Virtual Console injections (Game Boy Advance ROMs).

Credits & Acknowledgements

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